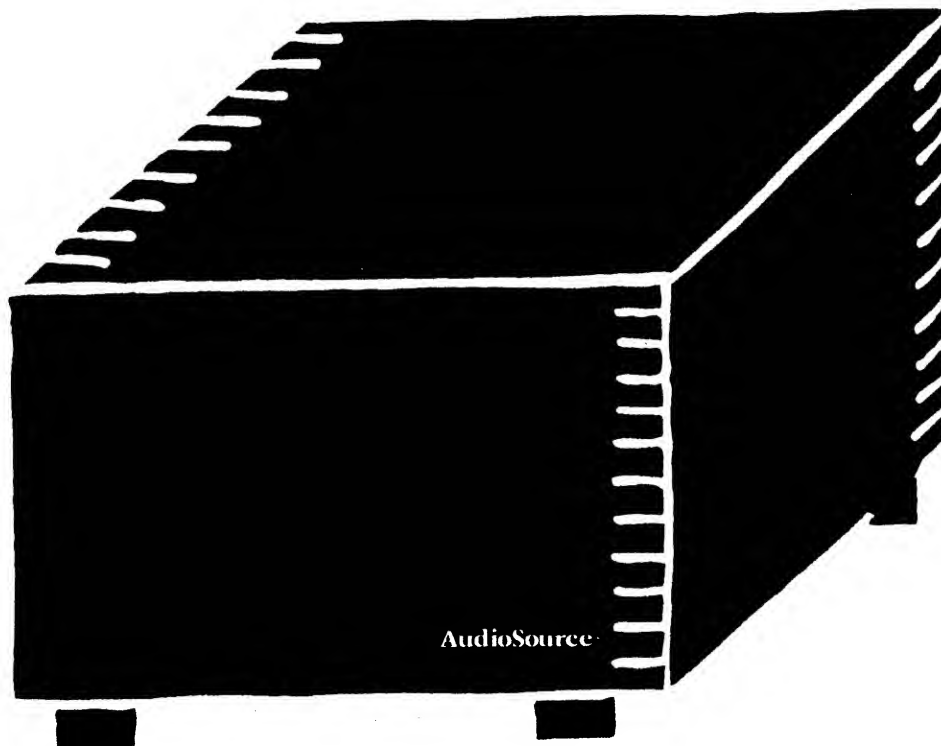


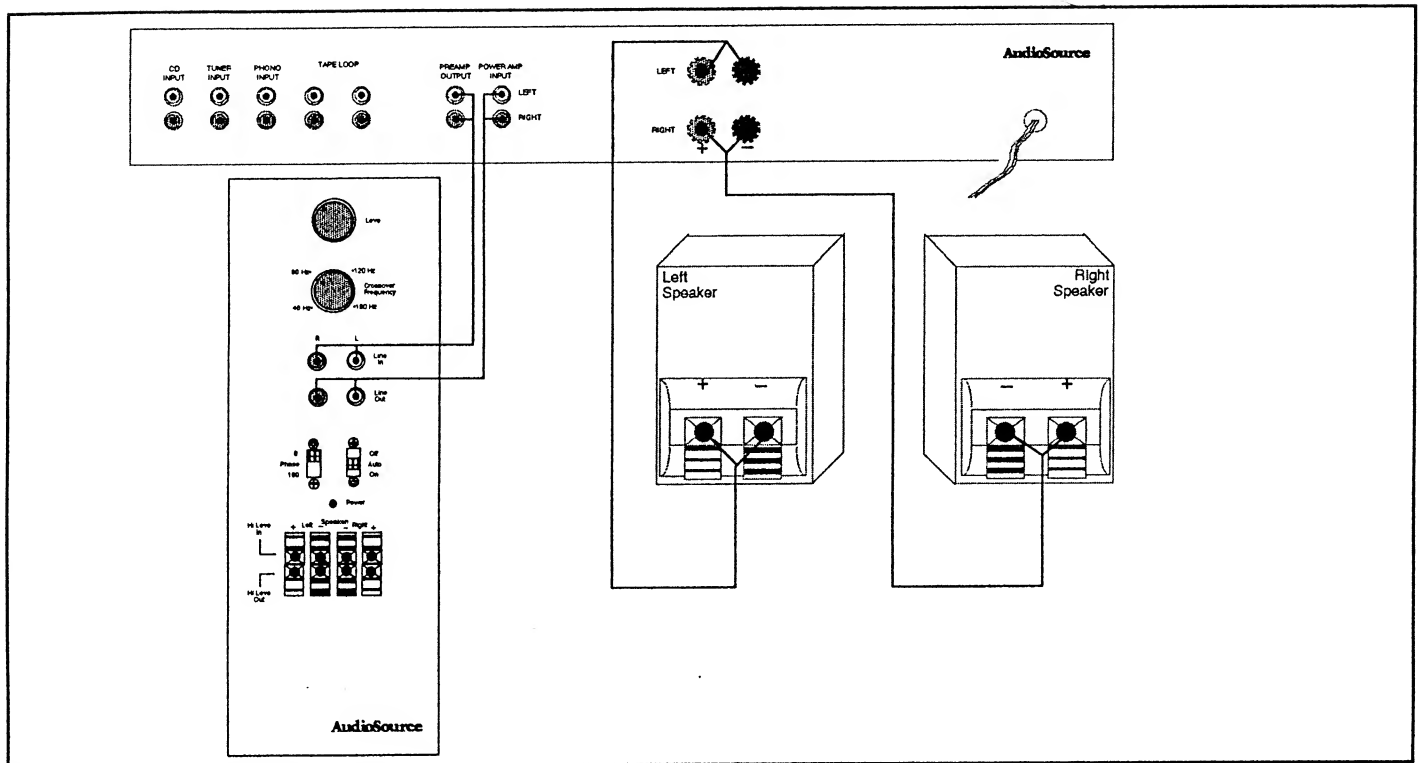
# **AudioSource**

## **SW Four**

Powered Subwoofer with Built-in  
Active Stereo Crossover and  
High Intensity Video Shielding

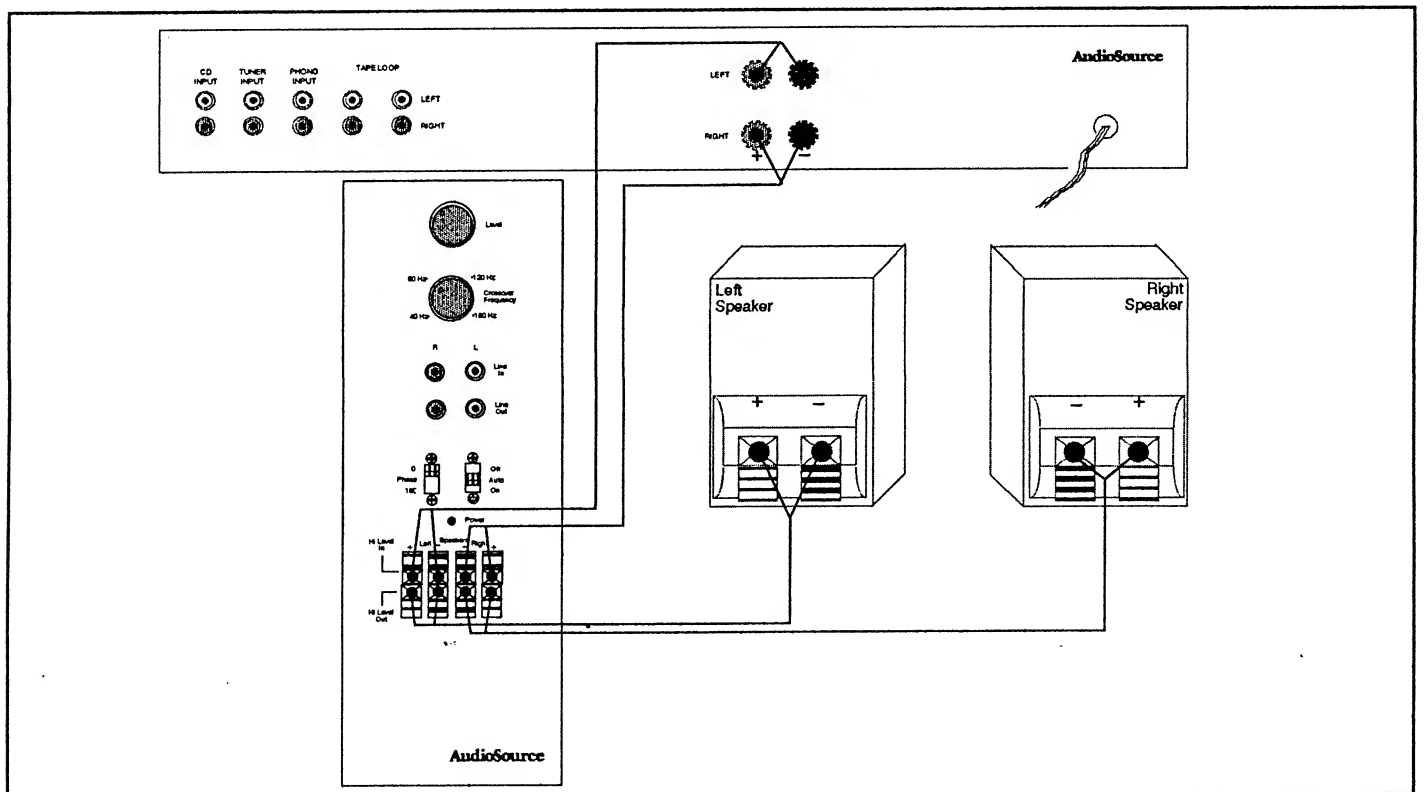


Congratulations on your new purchase, and welcome to the AudioSource family of satisfied customers. We trust that you will continue to enjoy the value and quality of your AudioSource SW Four Powered Subwoofer. In order to make sure that you are experiencing the best performance out of your unit, please take a few moments to read this manual before you get started. Also, be sure to retain this manual should you need to refer to it in the future.



## Line Level Connections

In this example, the Pre-Amp outputs of a stereo receiver are connected to the SW Four line inputs. The line outputs on the SW Four return the line level signal to the Power Amp inputs on the stereo receiver, which in turn powers the Left and Right speakers.



## HI Level Connections

Here the signal is already amplified as it leaves the receiver/amplifier. The speaker terminals of this unit are connected to the hi level inputs of the SW Four. The Left and Right speakers receive the original amplified signal from the SW Four hi level outputs.

## **SW Four Overview**

The AudioSource SW Four represents the state of the art in self-powered subwoofer systems. The highly efficient ported enclosure houses a rugged twelve inch, reinforced driver, plus a powerful one hundred fifty watt amplifier, all teamed up with an integral stereo crossover network. This precision matched combination ensures that the SW Four will deliver the best sound possible, under even the most demanding conditions. The advanced, down-firing design disperses the sound evenly throughout the listening area. Crossover frequency, as well as input level, are both variable over a wide range, allowing the SW Four to complement a variety of applications. Line level and hi level inputs and outputs are provided for fast and easy connection to virtually any system. The three-way Auto Power and the Phase Reverse functions complete the list of professional features offered by the SW Four.

## **A Few Words About Subwoofers**

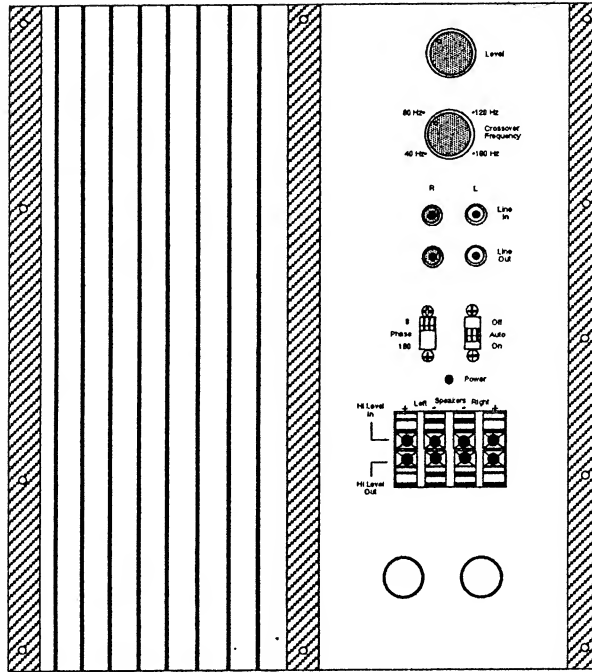
Subwoofers are designed to introduce extended bass response to your system, beyond what traditional speakers alone can offer. The subwoofer is used in conjunction with, not in place of, your existing speakers. It is not necessary to have a pair of subwoofers. The low frequency sounds created by the subwoofer will radiate equally into your listening area. A single subwoofer can dramatically enhance a simple TV, a stereo system, or a full fledged Home Theater system.

The advent of digital recording has increased the amount of low bass information that can be accurately recorded. A subwoofer can reproduce this low bass information. On the Home Theater front, many video tapes and movies are recorded featuring low frequency information well below the "musical" range of traditional loudspeakers. However, this information can be vital to the impact, ambience, and believability of a scene. Again, a subwoofer can faithfully restore those elements to your Home Theater listening experience.

## **Some System Guidelines**

In setting up your subwoofer, keep in mind a few rules to assure yourself of the best performance. Placement of the subwoofer is not crucial. Locating the subwoofer near a wall or in a corner will increase the bass response of the speaker. The sound waves coming from the SW Four are long, and need room to propagate. A subwoofer placed too close to the listener will not sound as full as one placed a few feet further away. The level of the SW Four is best set while listening to all the speakers. By itself, the sound of the SW Four is hard to distinguish.

The cabinet of the SW Four is designed to blend in with most decors. It can also be easily hidden under an end table or coffee table, behind a sofa, near the corner, etc... If you decide to place anything directly on the SW Four, use great caution as the speaker cabinet will vibrate and items placed on top may shake loose or fall.



## Using the Controls

### Power:

The power control has three positions: On, Off, and Auto. The Auto position is the normal setting. This keeps the subwoofer amplifier in a standby mode. Using sophisticated signal sensing circuitry, the SW Four amplifier is instantaneously activated whenever a signal is detected at either of the inputs. If no signal is detected over a period of minutes, the amplifier switches back to the standby mode. The On and Off positions override this circuit, setting the SW Four permanently On or permanently Off. The red "Power" LED indicates when the SW Four is On.

### Phase:

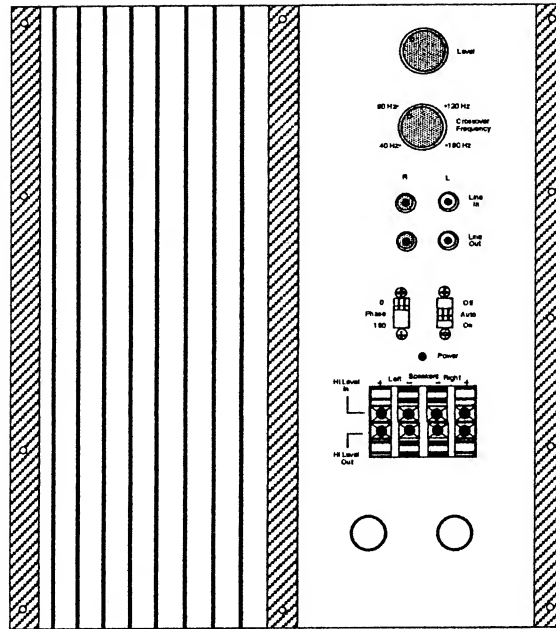
The normal setting for the Phase switch is the  $0^\circ$  position. Because the SW Four is not in the same cabinet or the same location as your other speakers, the sound from the SW Four may arrive at your ears at a slightly different time than the sound from your other speakers - it may arrive "out of phase". In these rare cases, there will be a cancelling effect in the upper bass and lower midrange. The bass sounds will appear somewhat hollow and the level control may seem to have little or no effect. Setting the phase switch to the  $180^\circ$  position will compensate for these effects. Let your ears decide which setting sounds best.

### Level:

The SW Four will be playing along with the other speakers in your system. The level control will allow you to balance the volume of the SW Four to blend in with your system. Once this level control is set, it should not require further adjustment. The volume of the signal coming into the SW Four will determine the listening volume. Start with the level control all the way down. Then, with the other speakers playing, slowly increase the level of the SW Four to the desired level. The sound where you normally listen to your system may be different than the sound at the SW Four while you are making this adjustment. It might take a few rounds of stepping back and listening to get the level set correctly.

### Crossover Frequency:

The crossover acts as an audio prism, separating sounds of different frequencies from each other. The crossover frequency control is used to adjust at what point the crossover will separate the low frequencies being used by the subwoofer from the high frequencies continuing on to the rest of the system. The normal range for this control will be between 80 Hz to 120 Hz. Raising the crossover frequency will increase the range of sounds the SW Four will reproduce. Lowering the crossover frequency will limit the range of frequencies reproduced by the SW Four.



# Connecting the SW Four

## General Information

The diagrams on the following pages show four of the most common applications of the SW Four, and the associated wiring for each of them. Your specific needs may vary, and the following information will guide you through your hookup requirements.

Each and every sound coming into the SW Four will first pass through the crossover. The portion of the sound below the current crossover frequency setting will continue on through the SW Four; through the level control, into the amplifier, and is finally heard through the speaker. The incoming sound is available at the outputs to be returned to the rest of your system, if needed. If you have a choice between different ways to hook up the SW Four to your system, remember that it may be easier to run long distances with speaker wire than with line connectors.

## Hi Level In

These inputs are designed to accept an amplified signal from the speaker outputs of a receiver, power amp or other device not equipped with line level outputs.

## Hi Level Out





The original amplified signal connected to the hi level inputs is present at these outputs. From here the signal may continue on to the existing Left and Right speakers.

## Line In

These "RCA" style jacks are designed to accept a line level signal from a receiver, pre-amp, surround sound decoder, or a similar device. When using a single line level output from another unit, you may wish to use a "Y" connector to send the signal to both the Left and Right line ins on the SW Four. *(Using the Tape Loop of a receiver or pre-amp is not recommended when hooking up the SW Four. Tape jacks typically send a constant level, regardless of the volume setting on the front panel, unlike the Pre-amp outputs. This would affect the balance between the subwoofer and the rest of the system.)*

## Line Out

From these "RCA" style jacks, a line level signal equal to the original input signal is available. This signal carries the original Left and Right information. From here, this signal may be returned to the power amp inputs of your existing system.

<p><b>WARNING:</b> To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.</p>	<div data-bbox="841 100 993 235">  </div> <p>The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to persons.</p> <div data-bbox="841 298 993 432">  </div> <p>The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.</p>
<div data-bbox="165 262 279 369">  </div> <div data-bbox="300 235 649 369"> <p><b>CAUTION:</b></p> <p><b>RISK OF ELECTRICAL SHOCK</b></p> <p><b>DO NOT OPEN</b></p> </div> <div data-bbox="673 262 787 369">  </div>	<p><b>WARNING:</b> TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLETS UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.</p>
<p><b>CAUTION:</b> To reduce the risk of electric shock, do not remove cover (or back); no user-servicable parts inside. Refer servicing to qualified service personnel.</p>	

## Safety Instructions

**Read Instructions** - All the safety and operating instructions should be read before the appliance is operated.

**Retain Instructions** - The safety and operating instructions should be adhered to.

**Heed Warnings** - All warnings on the appliance and in the operating instructions should be adhered to.

**Follow Instructions** - All operating and use instructions should be followed.

**Water and Moisture** - The appliance should not be used near water. For example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

**Ventilation** - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in situation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

**Heat** - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

**Power Sources** - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

**Grounding or Polarization** - Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.

**Power-Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed on or against them, paying particular attention to

cords at plugs, convenience receptacles, and the point where they exit from the appliance.

**Cleaning** - The appliance should be cleaned only as recommended by the manufacturer.

**Power Lines** - An outdoor antenna should be located away from power lines.

**Non-use Periods** - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

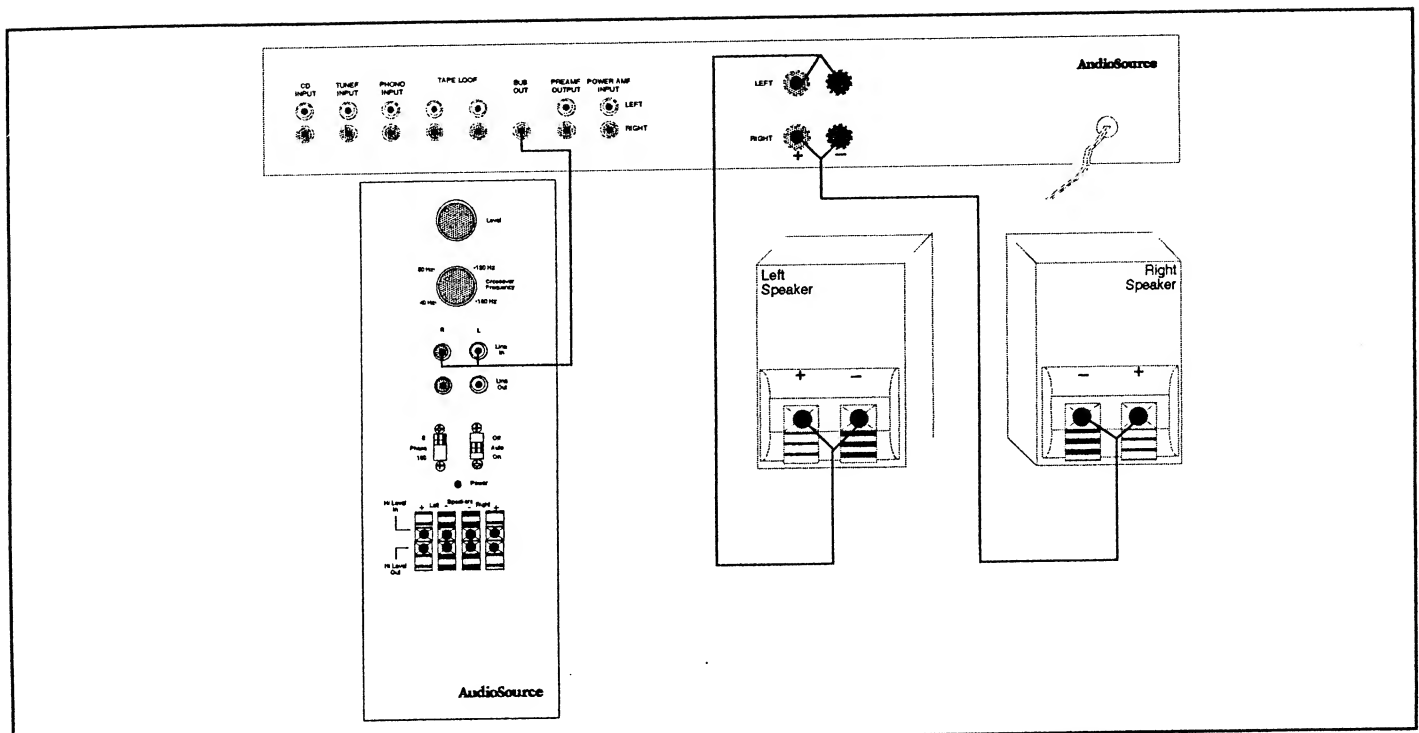
**Object and Liquid Entry** - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

**Damage Requiring Service** - The appliance should be serviced by qualified service personnel when:

- A) The power supply cord or the plug has been damaged; or
- B) Objects have fallen, or liquid has been spilled into the appliance; or
- C) The appliance has been exposed to rain; or
- D) The appliance does not appear to operate normally or exhibits a marked change in performance; or
- E) The appliance has been dropped, or the enclosure damaged.

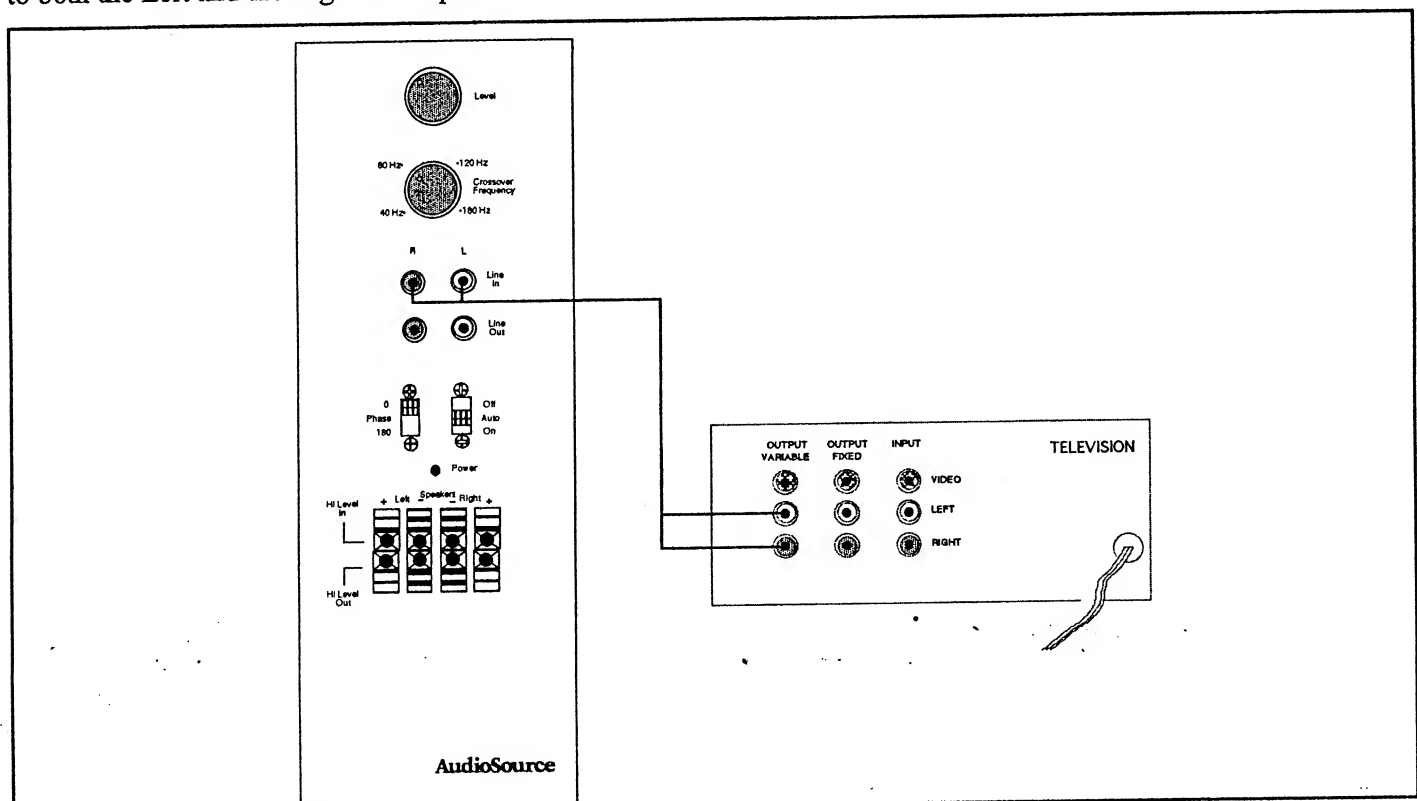
**Servicing** - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

**Product Servicing** - In the event your SW Four fails to operated properly, please contact the dealer where you purchased the unit. Or you may contact AudioSource directly for further assistance.



## Dedicated Subwoofer Connections

Many surround sound decoders, Home Theater processors and Audio/Video receivers are equipped with a dedicated subwoofer line output. In this case, the signal is already processed and does not need to return to the system or other speakers. Connect this line output to the line inputs of the SW Four. A "Y" connector may be used to feed this single output to both the Left and the Right line inputs.



## Television Enhancement

Many newer television sets are equipped with "variable" audio outputs; the signal available at these outputs changes in volume according to how the television volume is set. In this situation, these variable audio outputs can be connected directly to the SW Four line inputs to enhance the bass response of the television's built-in speakers.

## SW Five Specifications

Amplifier Power Output .....	150 Watts RMS
Frequency Response.....	20 Hz to 250 Hz
Signal to Noise Ratio .....	>90 dB
Driver .....	12" Dual Voice Coil
Subwoofer Crossover Frequency .....	40 Hz to 180 Hz
Functions .....	Power (On, Auto, Off)
	Phase (0°, 180°)
	Input Level
	Crossover Frequency
Remote Control.....	Subwoofer level
	Crossover Frequency
Inputs .....	Hi Level (Speaker )In
	Line (RCA) In
Outputs .....	Hi Level (Speaker) Out
	Line (RCA) Out

**AudioSource**

9300 North Decatur  
Portland, Or. 97203

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